

# 4

History-Social  
Science Standard  
4.2.6.



# Cultivating California



## **California Education and the Environment Initiative**

Approved by the California State Board of Education, 2010

### **The Education and the Environment Curriculum is a cooperative endeavor of the following entities:**

California Environmental Protection Agency  
California Natural Resources Agency  
Office of the Secretary of Education  
California State Board of Education  
California Department of Education  
California Integrated Waste Management Board

### **Key Leadership for the Education and Environment Initiative:**

**Linda Adams**, Secretary, California Environmental Protection Agency  
**Patty Zwarts**, Deputy Secretary for Policy and Legislation, California Environmental Protection Agency  
**Andrea Lewis**, Assistant Secretary for Education and Quality Programs, California Environmental Protection Agency  
**Mark Leary**, Executive Director, California Integrated Waste Management Board  
**Mindy Fox**, Director, Office of Education and the Environment, California Integrated Waste Management Board

### **Key Partners:**

Special thanks to **Heal the Bay**, sponsor of the EEI law, for their partnership and participation in reviewing portions of the EEI curriculum.

Valuable assistance with maps, photos, videos and design was provided by the **National Geographic Society** under a contract with the State of California.

### **Office of Education and the Environment**

1001 I Street • Sacramento, California 95812 • (916) 341-6769  
<http://www.calepa.ca.gov/Education/EEI/>

© Copyright 2010 by the State of California  
All rights reserved.

This publication, or parts thereof, may not be used or reproduced without permission from the  
Office of Education and the Environment.

These materials may be reproduced by teachers for educational purposes.



## Lesson 1 California's Changing Economy

None required for this lesson.

## Lesson 2 Hunters, Gatherers, Farmers, and Franciscans

- 1 Collection of Objects A . . . . . 2
- 2 Collection of Objects B . . . . . 3
- 3 Comparing Economies . . . . . 4

## Lesson 3 Documents of Changing Lives

- 4 Reflections from 1769 . . . . . 5

## Lesson 4 Mission San Gabriel's Influence

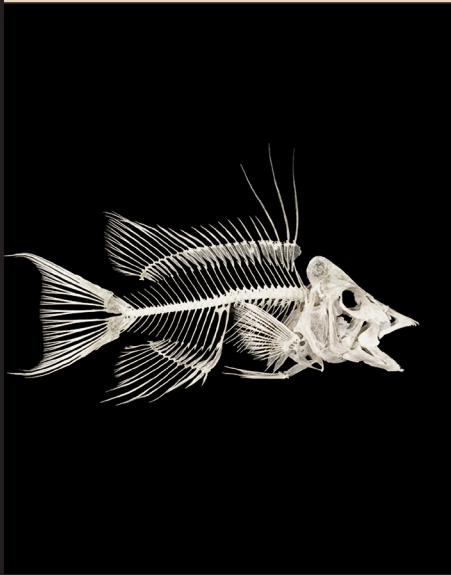
- 5 A Self-Sufficient Mission's Lands . . . . . 6
- 6 Agricultural Production at Mission San Gabriel . . . . . 7
- 7 Mission San Gabriel in 1800 . . . . . 8
- 8 Native Plants and Natural Systems . . . . . 9
- 9 Livestock and Natural Systems . . . . . 10
- 10 Wild River . . . . . 11
- 11 Water Control and Natural Systems . . . . . 12

## Lesson 5 Changing Natural Systems

None required for this lesson.

## Lesson 6 The End of Hunting and Gathering

None required for this lesson.

**VA #1 Collection of Objects A****Fish Skeleton****Mussel and Abalone Shells****House****Basket****Mortar and Pestle****Acorns**



## VA #2 Collection of Objects B

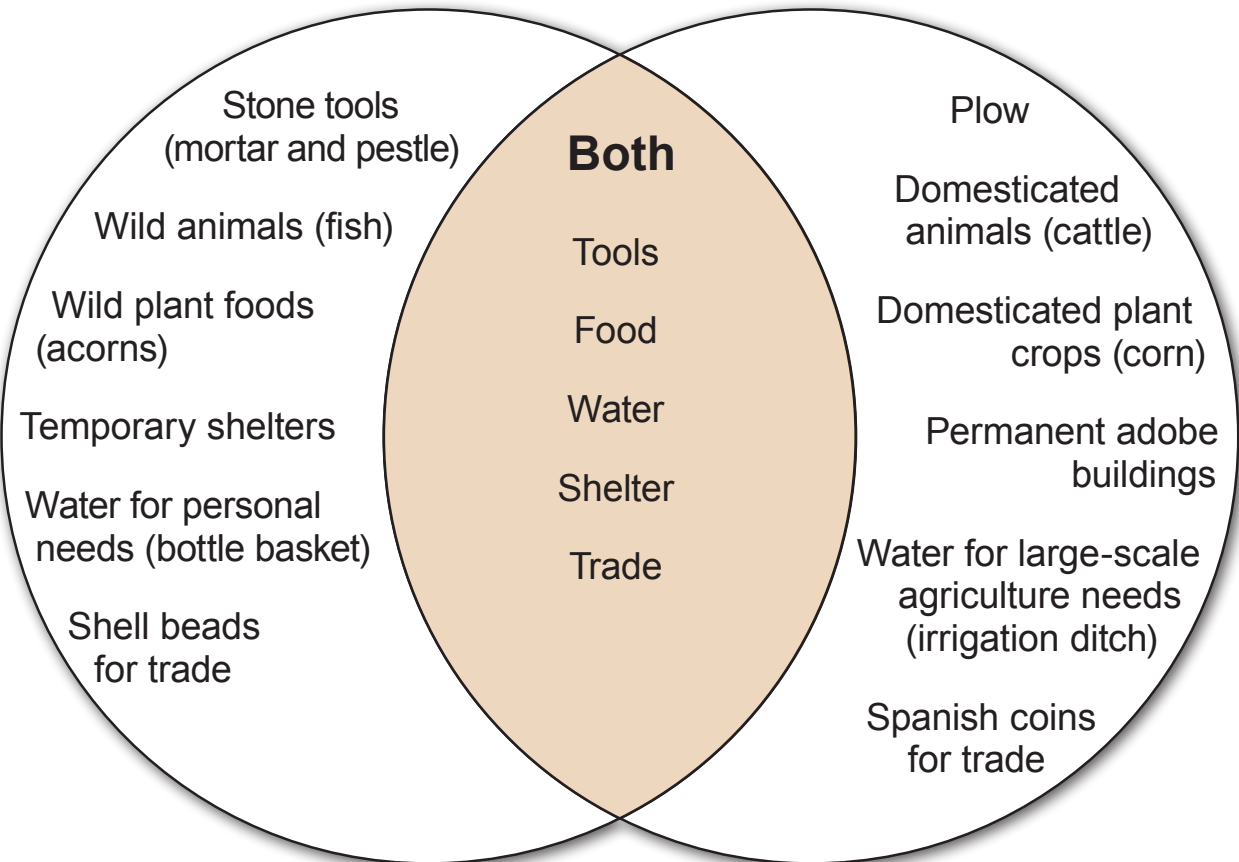
Cow Skull	Spanish Coin	Plow
		
Corn Kernels	Adobe Bricks	Irrigation Canal
		



## VA #3 Comparing Economies

### California Indian

### Franciscan Mission



1. What is the same about these economies?
2. What is different about these economies?



## VA #4 Reflections from 1769

### Reflections from 1769 by a Member of the Portola Expedition

“Great numbers of Indians came to the camp. They had presents of seeds, acorns, and honeycombs on stick frames.

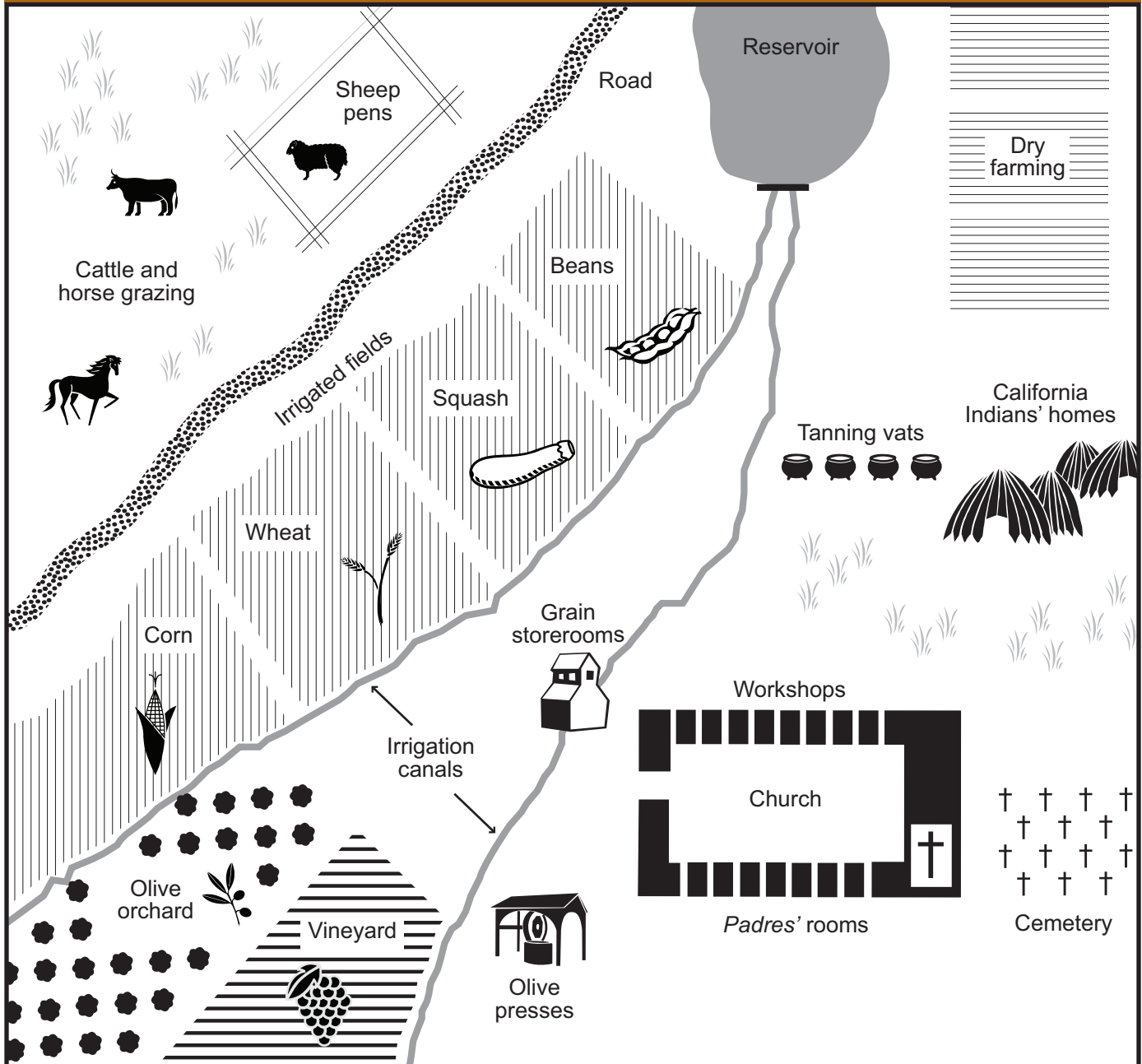
“The natives came with roasted and fresh fish, seeds, acorns, and other foods. They wanted us to eat. We treated them all kindly. We gave them glass beads, ribbons, and other small things. In trade they gave us baskets, furs, and feather plumes.

“Two large bands of Indians met us on the road. They gave us presents of pine nuts and some large trays of hot cereal. These helped meet the needs of our men.”

*Adapted from Costanso, 1911.*



## VA #5 A Self-Sufficient Mission's Lands





## VA #6 Agricultural Production at Mission San Gabriel

### Wheat

Year	Number of <i>Fanegas</i> Planted	Number of <i>Fanegas</i> Harvested
1771	$\frac{1}{2}$	0
1773	$5 \frac{4}{5}$	80
1775	8	109
1777	2	55
1795	179	2,600
1807	280	7,000
1821	237	11,000

### Livestock

Year	Number of Cattle	Number of Horses	Number of Sheep
1773	38	6	40
1783	900	140	1,800
1803	9,500	1,630	13,000
1807	9,500	1,605	10,000
1811	11,000	850	10,000
1829	25,000	2,000	15,000

Adapted from Jackson and Castillo (1995) and Engelhardt (1927).

## VA #7 Mission San Gabriel in 1800





## VA #8 Native Plants and Natural Systems



**Native plants cover the land.**



## VA #9 Livestock and Natural Systems



**Lots of livestock walking on a small area can damage plants. Sometimes this leads to erosion.**



## VA #10 Wild River



**This is a wild river. In a wild river,  
the water flows naturally.**



## VA #11 Water Control and Natural Systems



**Dams stop the flow of water in streams.  
Irrigation systems bring the water to the crops.**







California STATE BOARD OF  
EDUCATION

---

## California Education and the Environment Initiative